I-17: New River Traffic Interchange to Jct. SR 69 (Cordes Junction)

Design Concept Report and Environmental Studies

Project No. STP-017-A(ARV)

TRACS No. 17 MA 232 H6800 01L

I-17 Public Information Meetings

January 2007

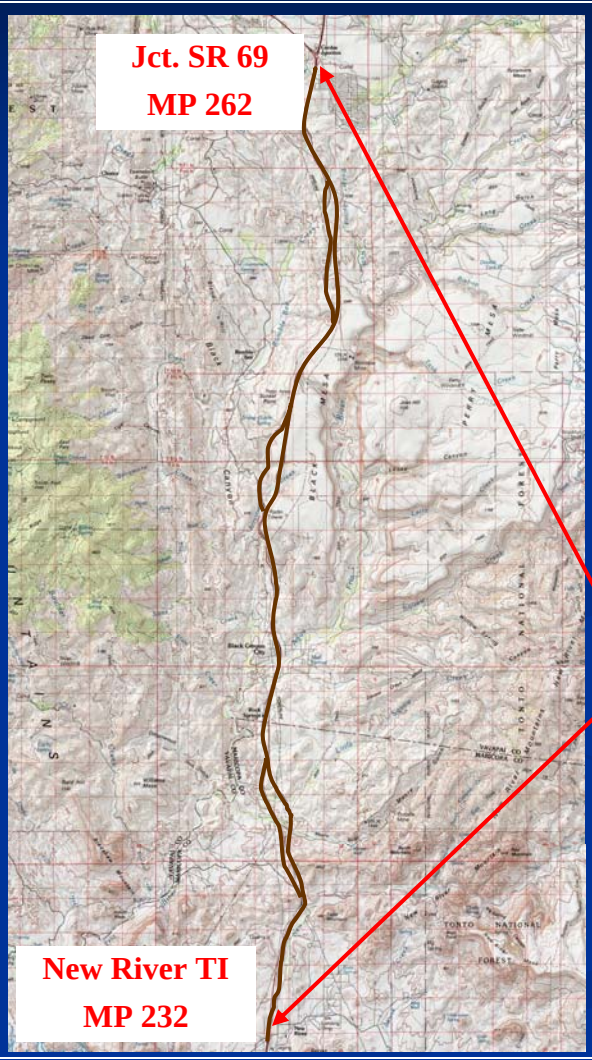
Meeting Agenda

- Project Overview
- Study Process, Goals
- Comments from Scoping Meetings
- Concept-level Alternatives
- Alternatives Evaluation
- What's Next?
- Public Comments and Concerns, Q&A
- Open House

Purpose of Project

Add capacity to and improve operations of I-17 from New River TI (MP 232) to Cordes Junction (MP 262)

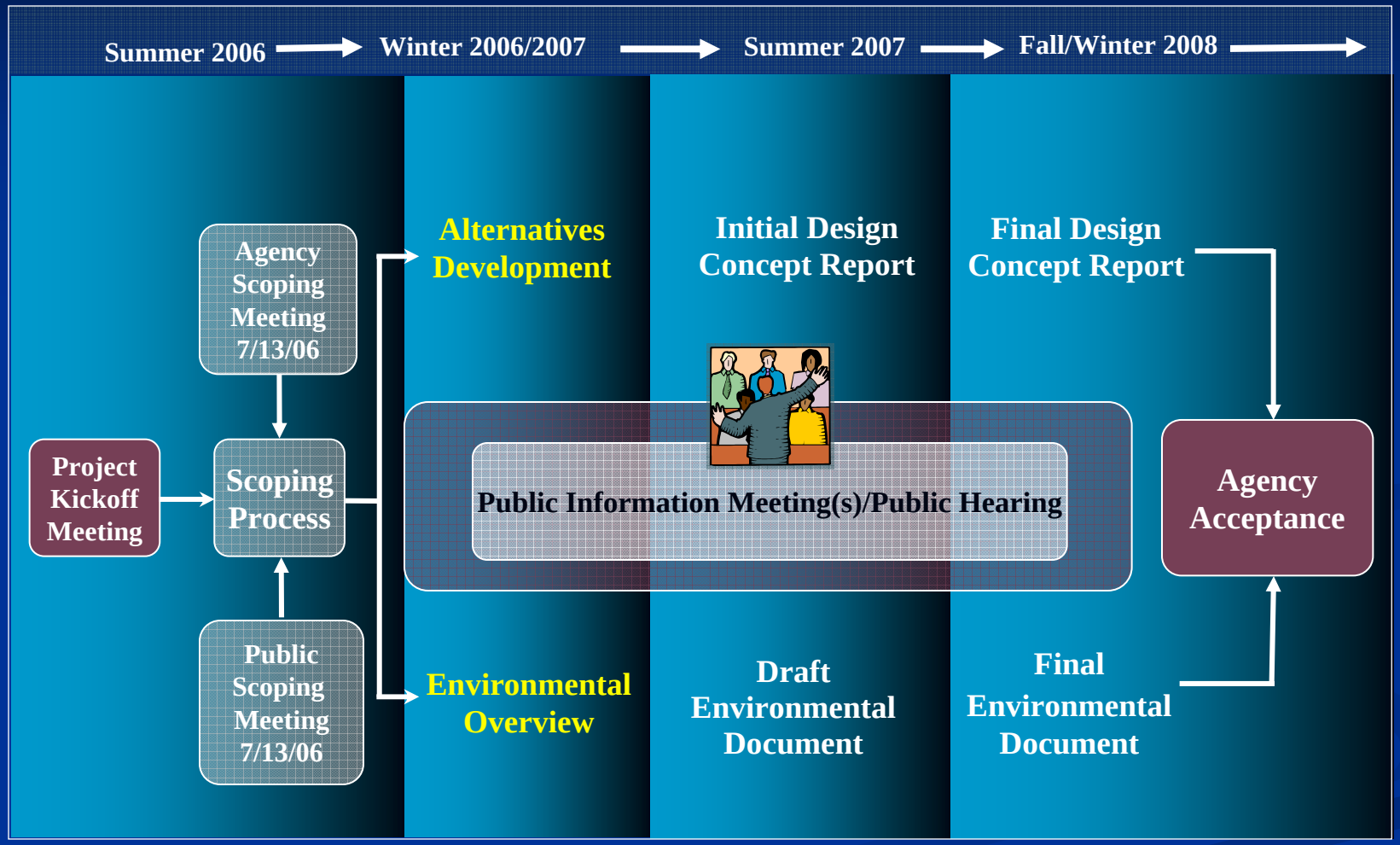
Study Limits



Study Limits:

New River Traffic Interchange to Jct. SR 69 (Cordes Junction)

Study Process



Involved Agencies

- Arizona Department of Transportation
- Federal Highway Administration
- Bureau of Land Management
- U.S. Army Corps of Engineers
- Western Area Power Administration

Five Year Construction Program

- Identifies transportation facilities to be constructed during the next five years
- Managed by the State Transportation Board
- Coordinates project implementation
- Develops finance strategies
- Facilitates regional collaboration on transportation initiatives

This study is the first step in eventually obtaining funding for constructing the project.

Comments to Date – Design

- Provide alternate route
- Add lanes in each direction
- Straighten curves along I-17
- Provide truck climbing lane on Black Cyn Hill
- Consider incident management measures – re-route traffic when necessary

Comments to Date – Social, Economic

- Eliminate unpredictable travel times
- Maintain access across I-17
- Widen I-17 as soon as possible because it is the lifeline to northern Arizona
- Consider future land use
- Optimize project costs

Comments to Date – Environmental

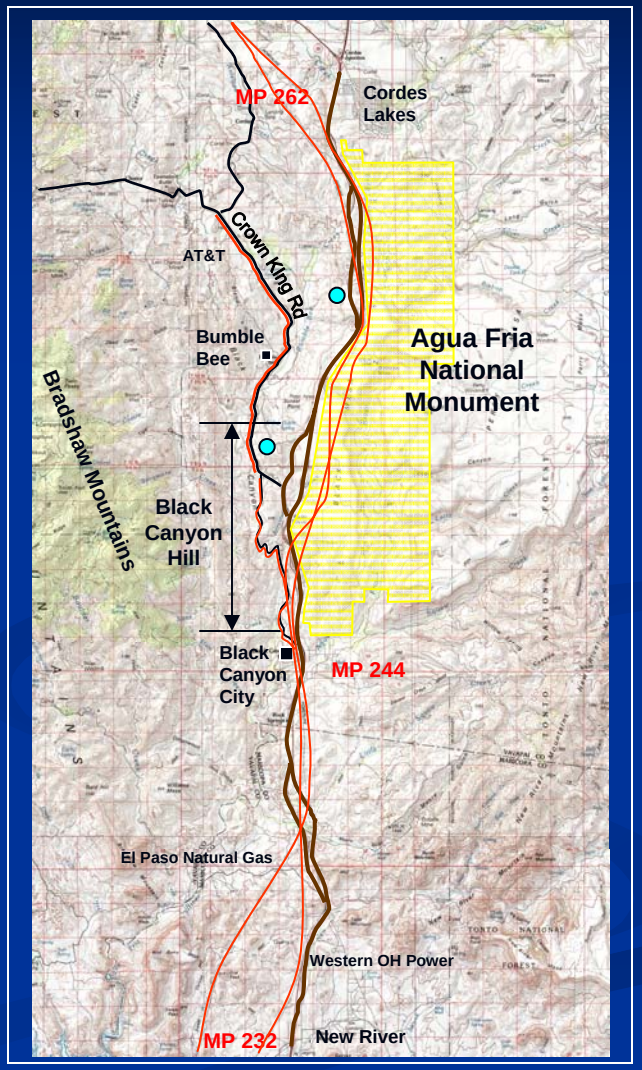
- Minimize impacts to Agua Fria National Monument
- Provide for wildlife habitat connectivity
- Minimize visual impacts; retain scenic character
- Avoid encroachments into wildlife corridors east of I-17
- Minimize impacts to cultural resources

Project Goals

- Minimize impacts
- Increase capacity of roadway
- Optimize benefit/cost
- Consider regional transportation needs

Project Constraints

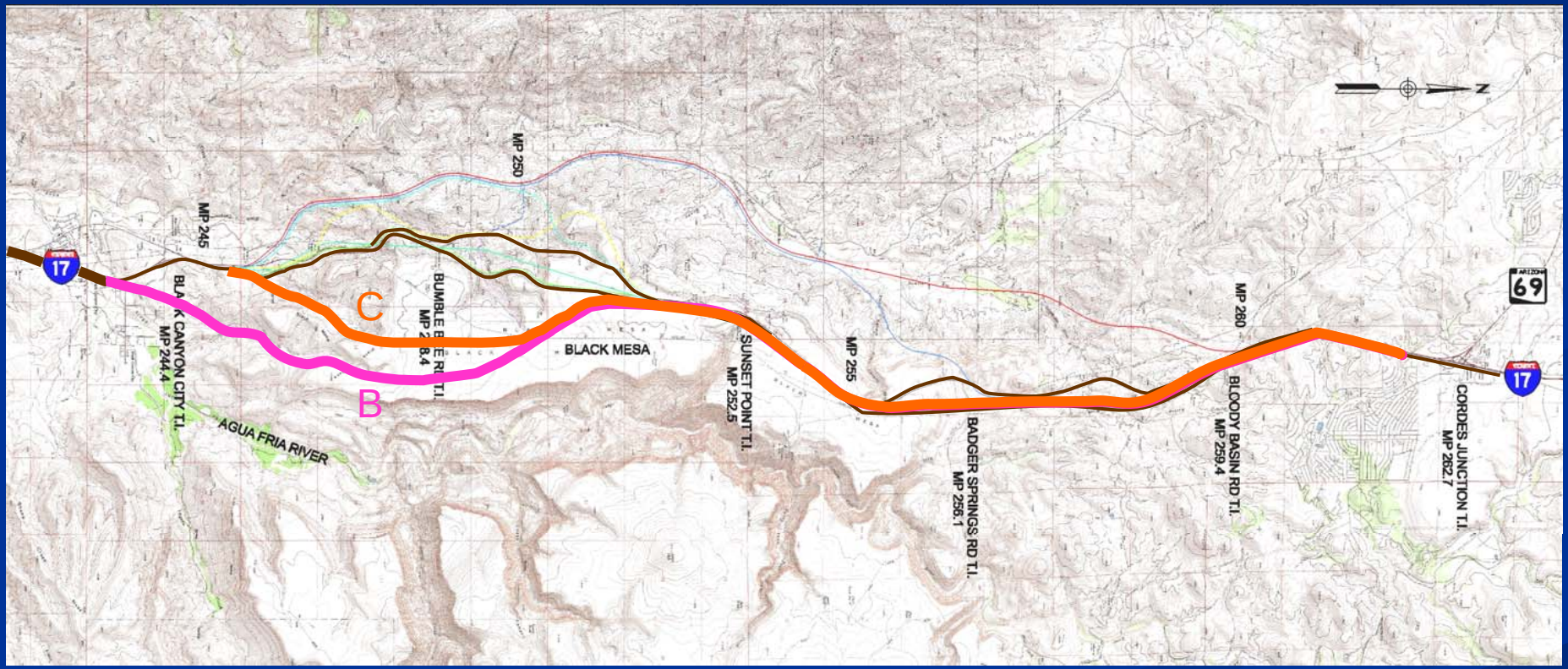
- Terrain
- Agua Fria National Monument (AFNM)
- Existing roads
- Water catchments for wildlife
- Utilities



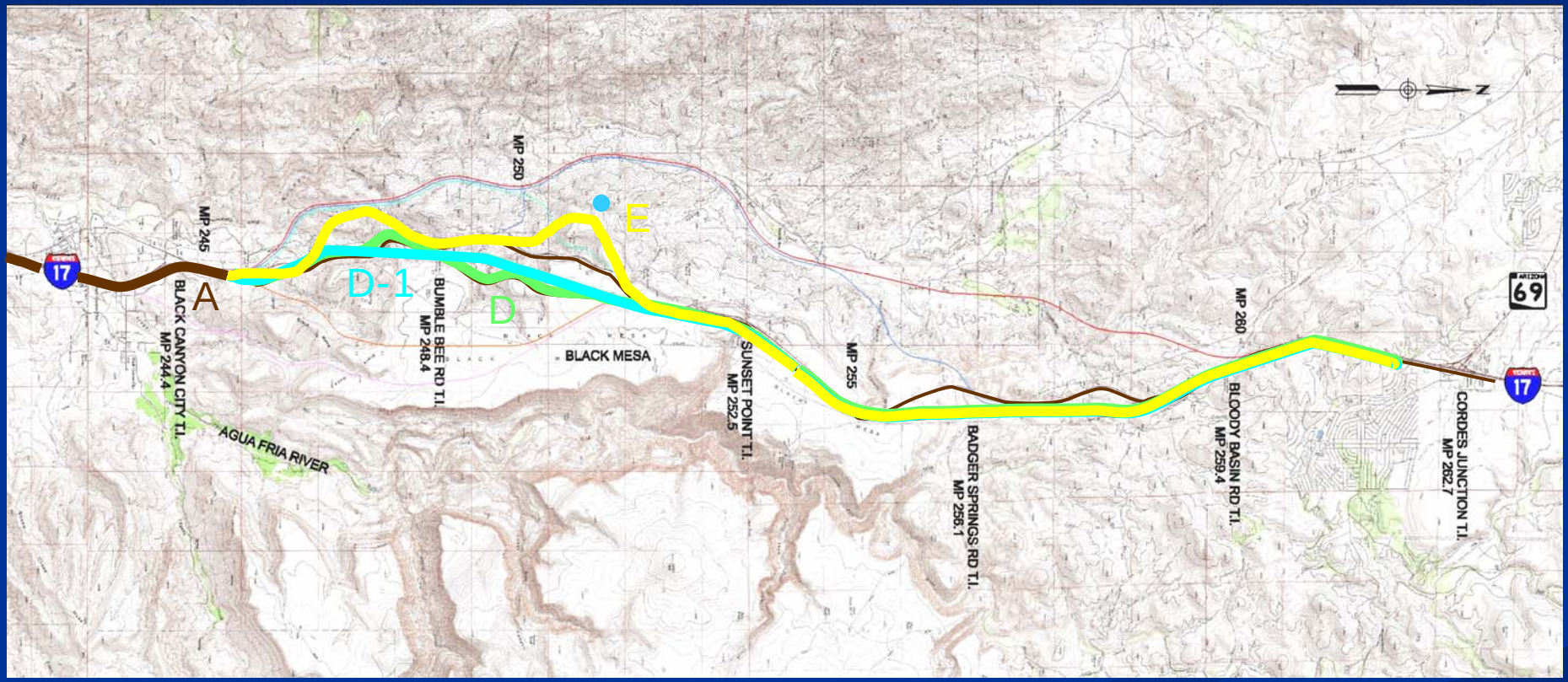
Concept-level alternative alignments developed for I-17 between Black Canyon City and Jct. SR 69

- Eastern – east of existing I-17
- Middle – near existing I-17 roadways
- Western – west of existing I-17

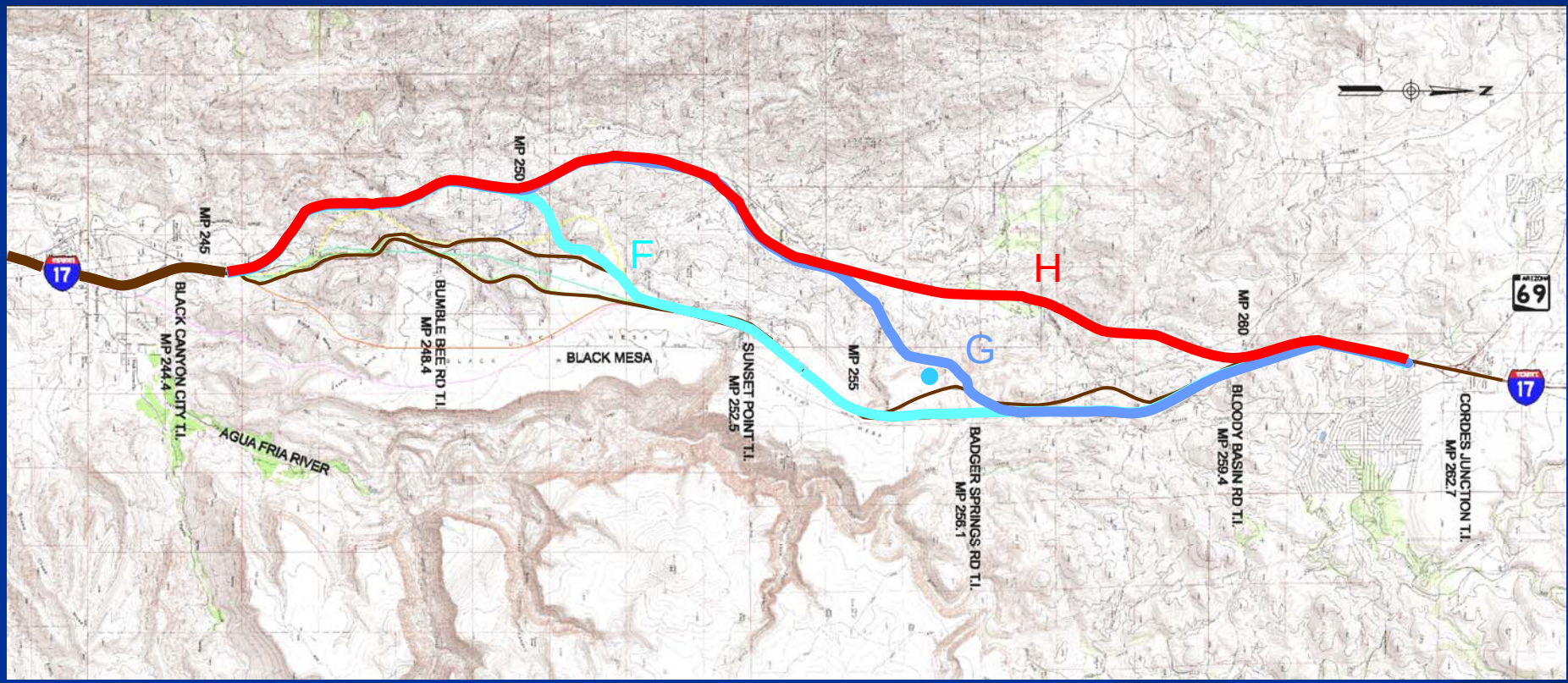
East Alternatives: B, C



Middle Alternatives: A, D, D-1, E



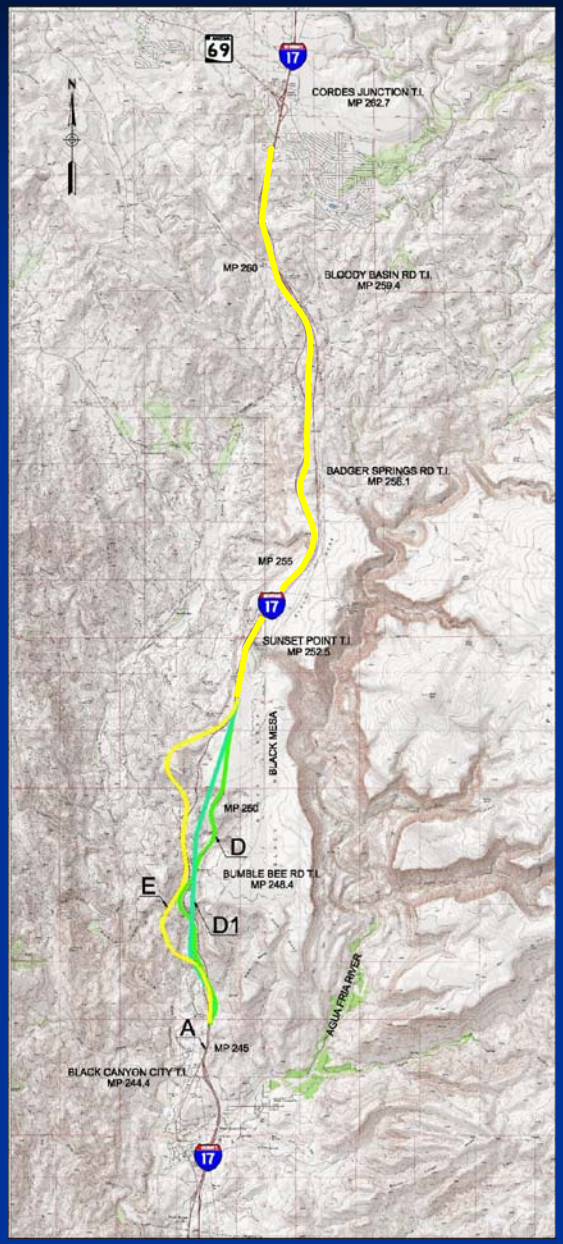
West Alternatives: F, G, H



East Corridor Alternatives

ALTERNATIVE B		ALTERNATIVE C	
ADVANTAGES	DISADVANTAGES	ADVANTAGES	DISADVANTAGES
• 7.7 miles of alternate route provided • Most existing interchanges retained • Minimal traffic disruption during construction	• High impact probability to wildlife–habitat fragmentation • High impact to AFNM resources • High visual impacts • Multiple residential displacements	• 6.0 miles of alternate route provided • Most existing interchanges retained • Minimal traffic disruption during construction • No residential displacements	• Very steep roadway grades (10%) • High impact probability to wildlife–habitat fragmentation • High impact to AFNM resources • High visual impacts

Middle Corridor Alternatives



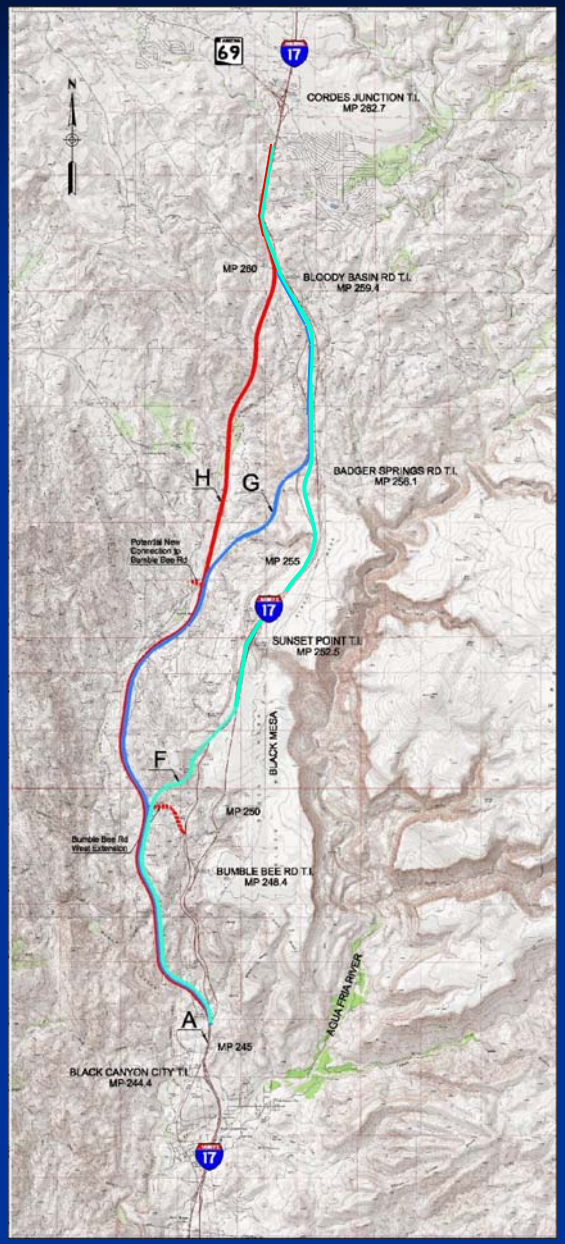
ALTERNATIVE A	
ADVANTAGES	DISADVANTAGES
•All existing interchanges retained •Right-of-way requirements are low •Potential improvements to wildlife movements	•Construction very disruptive to traffic •Existing roadway has steep grades and sharp curves •Minor impact to AFNM

ALTERNATIVE D	
ADVANTAGES	DISADVANTAGES
•All existing interchanges retained •Right-of-way requirements are low •Minor impact probability to wildlife–habitat fragmentation	•Construction disruptive to traffic •Unstable soils/ slopes & high rock fall hazard •4 mining claims affected

ALTERNATIVE D-1	
ADVANTAGES	DISADVANTAGES
•All existing interchanges retained •Right-of-way requirements are low •Minor impact probability to wildlife–habitat fragmentation	•Soil conditions generally unfavorable for tunneling •Tunnel costs very high •Must retain existing roadway for hazardous cargo

ALTERNATIVE E	
ADVANTAGES	DISADVANTAGES
•Most existing interchanges retained •Moderate traffic impacts during construction •Moderate impact probability to wildlife-habitat fragmentation	•Existing recreational trails severed •7 mining claims affected •Moderate to high visual impacts •Potential impacts to wildlife water catchment

West Corridor Alternatives



ALTERNATIVE F

ADVANTAGES	DISADVANTAGES
•6.8 miles of alternate route provided •Most existing interchanges retained •Minimal traffic disruption during construction •No impact to AFNM resources	•Very steep roadway grades (10%) •17 mining claims affected •Moderate to high visual impacts •High impact probability to wildlife–habitat fragmentation

ALTERNATIVE G

ADVANTAGES	DISADVANTAGES
•12.0 miles of alternate route provided •Minimal traffic disruption during construction •No impact to AFNM resources	•Potential impacts to Sunset Point TI and rest area access •17 mining claims affected •High impact probability to wildlife–habitat fragmentation •Potential impacts to wildlife water catchment

ALTERNATIVE H

ADVANTAGES	DISADVANTAGES
•14.7 miles of alternate route provided •Minimal traffic disruption during construction •No impact to AFNM resources	•Potential impacts to Sunset Point TI, rest area, and Badger Springs Ti access •21 mining claims affected •Moderate to high visual impacts •High impact probability to wildlife–habitat fragmentation

Evaluation Summary

		A	B	C	D	D-1	E	F	G	H
ENGINEERING	TRAFFIC OPERATIONS	○	◒	◒	●	○	●	◒	◒	◒
	RIGHT-OF-WAY (ACRES)	●	○	○	●	●	◒	○	○	○
	GEOMETRICS	○	●	○	●	●	●	○	●	●
	CONSTRUCTABILITY	○	●	●	○	○	○	●	●	●
	GEOTECHNICAL	◒	◒	◒	◒	○	◒	◒	◒	◒
	COST EFFECTIVENESS	○	○	◒	◒	○	◒	◒	◒	○
ENVIRONMENTAL & AESTHETICS	DISPLACEMENTS	●	○	●	●	●	●	●	●	●
	IMPACTS TO AFNM	◒	○	○	●	●	●	●	●	●
	WILDLIFE/HABITAT IMPACTS	●	○	○	●	●	◒	◒	○	○
	VISUAL IMPACTS	●	○	○	◒	◒	◒	○	◒	◒
	MINING CLAIM IMPACTS	◒	●	●	◒	◒	◒	○	○	○
	CULTURAL RESOURCES	◒	○	○	◒	◒	◒	◒	◒	○
	RECREATIONAL USES	●	○	○	●	●	◒	○	○	○
RECOMMENDED FOR FURTHER STUDY		**YES***	**NO**	**NO**	**YES**	**NO**	**YES**	**NO**	**YES**	**NO**

* Recommended for further study only in combination with other corridor alternatives.

●	◒	○
GOOD	FAIR	POOR

Project Schedule – What's next?

- Public comments requested: February 9, 2007
- Incorporate public comments into alternative selection process/report
- Identify alternative(s) to be carried forward for further study
- Prepare engineering and environmental technical analyses
- Present recommendations to public

Public's Role

- Ask questions
- Provide feedback (positive or negative)
- Tell us
  - What is important to you?
  - What are your concerns?

Public Comments and Concerns

Questions & Answers

Thank you for your comments.

http://www.azdot.gov/Highways/projects.asp

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